

**CLAIMS**

1. A novel essential oil mixture obtained from new chemo-type namely citronellol-rose oil type of natural and cultivated desert plant *Dracocephalum heterophyllum Benth* having high value of perfumery compounds, yield of about 0.45% on fresh wt. basis, said essential oil mixture obtained from:
  - (i) a natural plant comprising:  
cis-rose oxide 1.6%, trans-rose oxide 0.5%, citronellal 6.7%, citronellol 74.9%, geraniol 1.5%, citronellyl acetate 6.7%, neryl acetate 0.7%, geranyl acetate 1.3%, spathulenol 1.5%, citronellyl-isobutyrate 0.8%, citronellol formate 0.2% and  $\alpha$ -bourbonene 0.4%.
  - (ii) a cultivated plant comprising:  
benzaldehyde 0.2%, 6-methylheptanone 0.2%,  $\alpha$ -pinene 0.5%,  $\beta$ -pinene 0.2%, linalool 0.8%, cis-rose oxide 0.6%, trans-rose oxide 0.3%, citronellal 2.5%, citronellol 54.3%, neral 1.2%, geraniol 2.4%, geraniol 1.9%, citronellyl acetate 21.6%, neryl acetate 0.4%, geranyl acetate 11.7%,  $\beta$ -farnesene 0.1%,  $\delta$ -elemene 0.5%, spathulenol 0.2% and citronellyl-isobutyrate 0.3%
2. The essential oil mixture according to claim 1, wherein the constituents of said essential oil mixture are identified by Gas Chromatography (GC) and Gas Chromatography Mass Spectra (GCMS).
3. The essential oil mixture according to claim 1, wherein the yields of citronellol and rose oxide thus obtained are substantially higher than from any other *Dracocephalum* species.
4. The essential oil mixture according to claim 1, wherein the chemotype containing highest content of citronellol and rose oxides is designated as 6th type of chemo-type and named as citronellol, rose oxide type.
5. Use of an essential oil mixture according to claim 1, wherein said oil mixture content is a new commercial source for obtaining citronellol.
6. Use of an essential oil mixture according to claim 1, wherein said oil mixture content is a new commercial source for obtaining cis and trans rose oxides.
7. Use of an essential oil mixture according to claim 1, wherein said oil mixture content is a new commercial source for obtaining citronellyl acetate, geranyl acetate and citronellyl iso-butyrate.
8. A process of extraction of essential oil mixture from a new plant source, *Dracocephalum heterophyllum Benth*, said process comprising the steps of:

- (a) charging plant material with water in a round bottom flask attached to Clevenger type apparatus;
  - (b) heating the plant material to a boiling temperature;
  - (c) condensing the vapor to separate the volatile oil mixture from the upper layer of distillate to obtain the essential oil mixture;
9. A process according to claim 8, wherein the essential oil mixture yield from *D. heterophyllum* is about 0.45% on fresh wt. basis.
10. A process according to claim 8, wherein the plant material is selected from the whole plant.
11. A process according to claim 8, wherein the plant material is used obtained both from high altitude natural plants and from low altitude cultivated plants.